INDIANA DEPARTMENT OF
NATURAL RESOURCES

GEOLOGICAL SURVEY

611 NORTH WALNUT GROVE
BLOOMINGTON, IN 47405

Fri. 4 Aug 17

Location → Clayhole + Wentworth Woods Nature Preserves in Cook County, IL

Purpose → Scouting Ridges

People → Evin Argyelan + Todd Thompson

Weather → overcast, fine drizzle at times, upper 60's

Clayhole is much more overgrown than Wentworth. Both sites appear to have a peak N-pissing ridge one ridge landward of Michigan City Road.

SE area of Wentworth Woods has hard time under the Black Oaks and is a very clear area to work. Need vibracoring and geoprobe given the high dune cap.

Will need to do some shifting to collect ridges landward of the peak N-pissing

To Do:

1. Complete permits
2. Get LiDAR

Sat 5 Aug 17

Location → Portage point + other sites
Purpose → Photographing high-lake-level erosion
People → Erin Argyilan + Todd Thompson
Weather → clear, sunny, into upper 70's

Set photographs @ Portage Lakefront Walkway and @ Central Avenue Beach

Attended Dale Enquist memorial @ the Dunes Education Center in the late morning + afternoon

Sat 10 Mar 18

Location → Wentworth Woods against
Purpose → coring for shoreline
People → Erin Argyilan, Henry Looper, Quinton Thompson + Todd Thayer
Weather → sunny lower 40°s

Core 1801

Inside	2.30
Outside	1.08
	1.22 C+R

Wadsworth fill — No bottom loss in clay w/ white + grey pebbles + organics w/ oxidized halos. No slide down

Core 1802

Inside	2.03
	0.81
	1.22 C+R

Root @ top. Hit Wadsworth fill
2.28 - 2.03 = 0.25 slide down.

End Notes:

1. Will start in the SW corner of the east grid tomorrow
2. Two core almost exactly the same length and rodding
3. Found indot working on bridge 1/2 Hammond and possible geodetic survey marker. Need to talk to Hammond + Colonial Cabs about elevation control

Sun 11 March 15

Location : Wentworth Woods in east quad
Purpose : coring for foreshore
People : Erich, Henry, Todd + Quinten
Weather : cold, 30°s, partly sunny

Core 1803

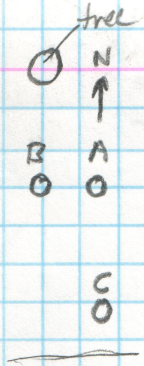
Inside	1.50	1.68
Outside	0.85	1.50
	0.65 C+R	0.18 slide down

Engine stopped when allen key came loose in engine. Repaired + restarted. No bottom loss in vf sd w/ shells

Core 1804 (dk gray)

Inside	1.60
Outside	0.74
	0.86

No slide down, no bottom loss. Bottomed in vf (dark gray) sd w/ shell debris + occasional med to coarse grains.



Core 1805A

Hit something near top and went in slow

Inside	3.20
Outside	0.89
	2.31

C+R

No slide down or bottom loss in vf sd w/ white shell debris.

Core 1805B

Inside	5.98
Outside	2.41
	3.57

No bottom loss, No slide down in vf sd w/ small amount of white shell debris

Core 1805C

Inside	5.54
Outside	2.73
C+R	2.81

No slide down or bottom loss.
Bottomed in vf sd

Core 1806

Inside	7.28
Outside	5.72
C+R	1.56

No bottom loss or slide down Bottomed in vf sd w/ shale/siltstone grains.

Core 1807

Inside	2.03
Outside	0.81
C+R	1.22

No bottom loss or slide down
Bottomed in vf sd.

Core 1808 Largest core, yet

Inside	2.12
Outside	0.94
C+R	1.18

Bottomed in med to lc sd. w/ granules. No bottom loss. No slide down

Mon 12 Mar 18

Location : Wentworth
Purpose : GPRing + vibracoring for Arrerlone + OSL
People Erin, Henry, Quentin, Todd + students
Cesar, Shiver, Rachael, + Samuel

Weather Cloudy, upper 30s

GPR Lines from 1808 saddle to

Running S to N

Project 1
Line 0, 8m, 8 stacks; Line started at 0 m
line length is 165.6 m
(tape length is 170 m)

Running N to S

Project 1
Line 1 9m, 32 stacks; line started at 170 m (tape measure length)

Reverse direction of Line 1
Line length: 165.45 m

Project 1 Running S to N
Line 2 10m, 64 stacks; line started at 0m
Line length: 164.7 m
50 m distance = crest of southern large ridge

Project 1 Running N to S Line started @
Line 3 12m, 64 stacks; 170 m (tape measure length)
Line length = 164.85 m

N end of peak Nip. platform ≈ 16.5 m distance (Northern high ridge)

northern Peak Nip. crest ≈ 35 m ; Base of saddle ≈ 55 m ; Southern high ridge 115 m distance

Corrects 10m = 9.84
flat cable = 1142.700
1136.000

Core 1809

Inserted 2.30
Ovled 1.60
0.70

2 flights

0.28 bottom loss in 2nd flight. 1st flight bottomed in orange med sd w/ coarse grains. 2nd flight bottomed

Core 1810A

Inserted 2.40
Ovbred 1.98
1.22

2 flights

0.55 bottom loss in 2nd flight
0.98 slide down in 2nd flight
No slide down or bottom loss in 1st flight. 1st flight bottomed in sandy gravel. Probably bottom of FSh + broke off the USh.

other cores tomorrow

Tues 13 Mar 18

Location — Wentworth Woods SE Quad.
Purpose — Coring for bedrock + OSL
People — Erin, Henry, Quinton, Todd, Samuel + Stacey
Weather — Partly sunny, cold @ most 30°s, snow flurries @ times

Core 1810B

2 flights

Inside	2.24
Outside	0.90
	1.14

0.10 bottom loss on 2nd flight in poorly sorted fine sd to gravel. 0.55 slide down in second flight

Core 1810C

2 flights

Inside	1.19
Outside	0.77
	0.42

1.32 slide down in 2nd flight hottened in coarse sd. No bottom loss in 2nd flight. No slide down or bottom loss in 1st flight

Core 1811

2 flights

Inside	2.17
Outside	1.77
	0.40

2nd flight bottomed in poorly sorted vf to m sd w/ shell debris + woody stuff.
No bottom loss or slide down

Core 1812

Inside	1.55	1 flight
outside	0.91	
C+R	0.44	

Bottomed in fine sd w/ shells,
No bottom loss or slide down

Core 1813A — 2 flights

Inside 2.48
Outside 2.09
0.39

Showing

No bottom loss on 2nd flight. Bottomed in fine sd. 0.23 slide down in 2nd flight.

Core 1813B — 2 flights

Inside 1.32
Outside 0.84
0.48

No bottom loss in vf sd w/ shells in the 2nd flight

Core 1813C — 2 flights

Showing

Broke engine pull

Inside 3.14
Outside 2.61
0.53

Nice long core. Bottomed in gray vf sd. No bottom loss or slide down.

End Note:

1. Took engine to small engine shop in Griffith. Should be ready tomorrow morning.
2. Will start digging pits tomorrow.
3. Triple covers on 1805, 1810 + 1813. These are the highest ridges. Need one core in the corners good to begin with.
4. Will GPS core sites while I wait on the pits and pick up engine

Wed 14 Mar 18

Location : Wentworth Woods, SE Quad.
Purpose : Pts for OSL
People : Erin A., Henry L., Quintin T., Tobye T., + Ervin student
Weather

OSL Pts:
1. 1805
2 1810

Q+T surveyed
1801 to 1809, elevation left on stake @ S end of Central Apk Line

End Notes
1. T+H entered site data into computer in WW.xls file
2. Need to collect 1811 today, skip 1813 OSL + finish surveying
3. John Johnston survey tomorrow

Thu 15 Mar 18

Location: Nunnworth Woods SE Quad
Purpose: OSL ing, vibracoring, + surveying
People: Evin A., Henry L., Quintin T., Todd T., John J. in pm, + Cesar + Samuel

Weather: low 30's to mid 40's, sunny

Large ridge of probable Nip

Core 1814A

2 flights

Inside	4.46
Outside	3.08
CAR	1.38

Bottomed in wt sd w/ shells. No bottom loss or slide down

Core 1814B

1 flight

Inside	4.16
Outside	2.36
	1.70

No bottom loss or slide down

Core 1815 — In NW Quad

Inside	1.47	1 Flight
Outside	0.81	
C+R	0.86	

No bottom loss or side cloure in dk gray vf sd w/ white shell debris

Core 1816 — Next to road

Inside	3.28	
Outside	2.56	2 Flights
	0.72	

0.02 bottom loss in gray vf grained sd.

Core 1817 — 1 Flight

Inside	1.70
	0.75
	0.95

No bottom loss or side closure in gray vf grained sd.

First Ridge North (lakeward) of Wentworth Ave. Road sign. → **Core 1818A** 1 flight — FS Core

Inside	5.39
Outside	3.51
C+R	1.88

No btm loss. OR slide down
Grey fine US sand in btm.

Core 1818B 1 flight — OSL Core

Inside	3.24
Outside	0.74
C+R	2.50

No btm loss OR slide down
Grey fine US sand in btm.

Core 1818C Almost on top of ridge

Inside	3.30
Outside	2.72
C+R	0.58

1st flight

No btm loss OR slide down, Grey US.

0.85 slide down ⇒ 2nd flight

Surveying: Finished Surveying to 1814 w/ stake

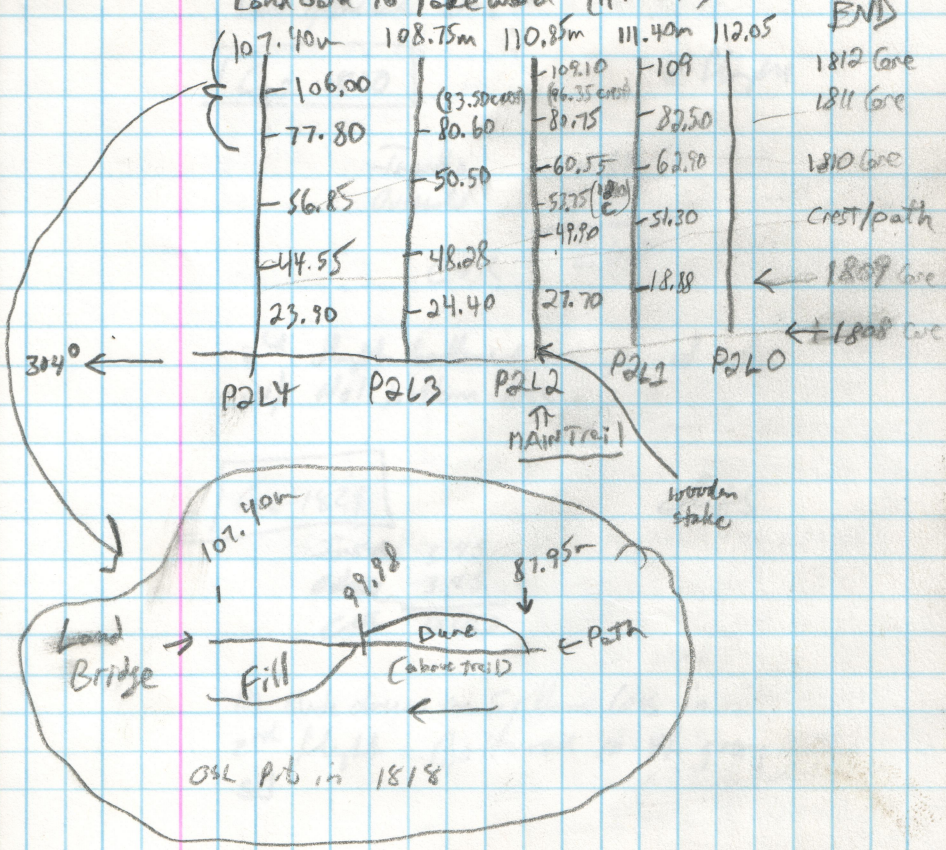
Fri 16 Mar 18

Location : Wentworth Woods SE grade and NW quad
Purpose : Geophy survey, surveying + pits
People : John Johnstone, Harry Lowe, Oswald T., Todd T., and Evin A in pm

185.1 NAD 83

GPR Lines:

Landward to lakeward (↑ North)



Broke
Ground

Core 1819 — 1 Flight

Inside 3.69
Outside 1.00
4.69

Lots of rodding. Bottomed in gravy
Live grained sd.

Core 1820 — 2 Flights

Inside 4.54
Outside 0.85
C+R 3.69

2nd flight bottomed in gravy w/ sd
w/ Nol bottom loss

Core 1821 — 2 flights

Inside 3.45
Outside 3.45
C+R 000

No slide downs or bottom loss in
2nd flight. Bottomed in the gravy
sd.

Core 1822

2 flights

Inside	5.21
Outside	3.59
	1.62

No bottom loss or scale down in gray vf sd

Saturday, March 17, 2018.

GPR'ing along Wentworth Ave.

Project 3 Line 0 [On Road] - On Pavement
→ started
- near River Oak Drive
- near 3 trees aligned parallel to landward of grass cut verge of forest.
- John GPS Point P3L0 GPRSTART
- end on corner of Midyam City Rd.

Project 4 Line 0 [Off Pavement - on Gravel]
→ same start as P3L0
→ end before corner on South side of old road.

Project 5 Line 0 [Off Pavement - On Gravel]
→ started 1808 W
→ 20m GPR = 1808 core site
→ end on S. side of old road.

Thurs 29 Mar 18

① Split + described 1805 A, + 1810 A
② Cleaned up Laundry